Will Identifying and tailoring a traditional Somali diet improve glycemic control in diabetic patients?

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Traditional Somali diet consists largely of starches which contributes to poor Diabetes outcomes.

INTRODUCTION

- Somalia is the 4th overall source of refugees to US between 2015-2017 with Arizona having the 4th highest resettlement of Somalis in the country (Mossaad, 2019)
- There is an increased prevalence of prediabetes and DM in Somalis compared to non-Somali following immigration to the USA, 21.3% vs 17.2% (pre-DM) and 12.1% vs 5.3% (DM) respectively. (Njeru, 2016)
- Like many of our refugee populations, there are many barriers to effective diabetic education and management
  - In Somali culture: obesity=wealth
  - Deficits in medical language from colonization & Civil War
- Study Objectives
  - Assess the Somali Diet
  - Consult a nutritionist to tailor the traditional diet
  - Create an AVS for Somali patients with DM

METHODS

1. Literature review was performed reviewing published resources on diabetic meal planning/education from Ethno-med, Seattle Children Hospital, Reach Coalition
2. Compared Carb difference in Somali and American Diet
- Using Somali Carbohydrate Counting Guide (QR Code),we calculated the average carbohydrate count per meal of typical meal compared to average American meal
3. Consulted Nutritionist and reviewed recipes for a variety of staple Somali dishes on dietary
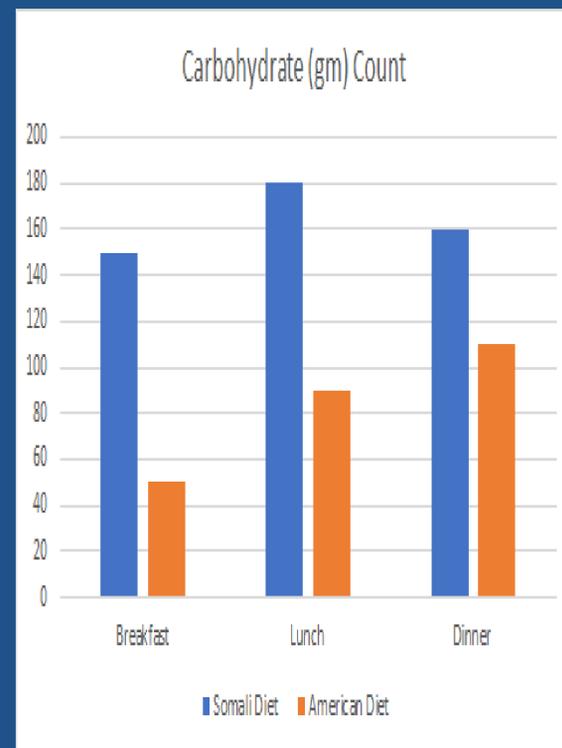4. Created AVS tailored to Somali diet which incorporated those recommendations

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RESULTS

- Traditional Somali diet consists largely of starches/carbohydrates, mainly from refined grains
- Somali breakfast, lunch and dinner contains, on average, 150g, 180g, 160g of carbohydrates, compared to 50g, 90g, 110g compared to the typical American diet respectively (table A).
- In addition, foods are often sweetened w/ sugar (ie injera, tea)
- Nutritionist recommendation:
  -exchanging sorghum/corn flour for other healthier bean-based flour (chickpea, garbanzo)
  -encourage more vegetables/protein
  -Focus on "what to eat", not what they shouldn't eat
  -Recommended Plate Method: 50% vegetable, 25% Carbohydrate, 25% Protein

DISCUSSION

- Review of literature and analysis of traditional Somali diet demonstrated propensity for high glycemic diet compared to American diets
- Barriers to compliance of nutritionist recommendation
-Plate method too restrictive, can lead to second portions/overeating
-Food substitution can lead to changes in food quality, increased cost, limited availability at local halal market
- Final recommendations:
- Updated Plate Method: ⅓ portions for carbs, protein, vegetable
- With guidance from nutritionist an AVS was created incorporating ADA dietary recommendations with traditional foods (table B and C)
- Next Steps: Future studies could incorporate this AVS with Diabetes management in Somali patients to test its acceptability and effectiveness.

A — Carbohydrate (gm) Count (Somali Diet, American Diet)

B

C

Somali Carbohydrate Counting Guide

FAQ

What if my intro/methods/results doesn't fit in the silent bar?

- If you're trying to put so much into that bar that it doesn't fit, they won't have time to read it anyway. First try moving stuff to the ammo bar. Next, cut cut cut.

- Instead of trying to fill space, you're trying to conserve space.